

## PITTOSPORUM BRACTEOLATUM ENDL. (PITTOSPORACEAE) FROM NORFOLK ISLAND

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*Abstract.* A seedling of *Pittosporum bracteolatum* Endl. of Norfolk Island, grown at the Auckland Institute and Museum, flowered in 1967, 1968 and 1969. Fruit formed in 1968. The flowers and fruit are illustrated.

Sir Joseph Banks (1743 - 1820) arranged for the botanist Robert Brown and the botanical artist Ferdinand Bauer to accompany Lieutenant Matthew Flinders in H.M.S. *Investigator* to survey the coast of Australia. The vessel left England in 1801, and explored the land then known as New Holland during 1802 and 1803. The *Investigator* was condemned as unseaworthy at Port Jackson in 1803, and Lieutenant Flinders sailed for England to obtain another vessel. Robert Brown and Ferdinand Bauer remained in Australia for a further eighteen months, during which time Brown visited Tasmania and Bauer spent eight months on Norfolk Island (Flinders 1814; Stearn 1960, p. 34).

Among the plants collected by Bauer on Norfolk Island was a new species of *Pittosporum* described by S. L. Endlicher (1833, p. 78) as *P. bracteolatum*. Endlicher recorded that the plant was found at Mt Pitt, and flowered in September. Subsequent authors added the following information.

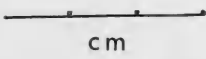
"This bears the absurd name of Oleander on the Island". Maiden 1903, p. 697.

"Common in the bush. Endemic." Laing 1915, p. 27.

"Fairly common. Erect tree up to 40 ft high. Carrying fruit in May. Fruit much larger than those of any New Zealand species of *Pittosporum*. In flower June. Flowers creamy-white, fragrant. Some Islanders call this 'Oleander'; others call it the 'Snow-drop tree'. (The introduced *Nerium oleander* is called the 'Mountain Rose'.) Leaves have a faintly sweet smell when crushed, similar to those of *P. eugenioides* of New Zealand. Lane-Poole gives its name as 'Oleander' and says that the wood is used for picture frames, etc." McComish 1937-8, p. 88.

From the original description of Endlicher and the specimens in the herbaria of the Royal Botanic Gardens, Kew, and the British Museum (Natural History), South Kensington, it seemed probable that the species would be suitable for cultivation in New Zealand. Efforts to obtain the plant from Norfolk Island were unsuccessful until 1961 when Mr. A. Cates brought back seeds which were raised by Mr. J. Hunter at the Plant Diseases Division of the Department of Scientific and Industrial Research at Mt Albert.

A seedling was planted in the Museum courtyard in the winter of 1963. It grew to 4 metres tall, and flowered in August 1967. No fruits formed. The tree flowered



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FIG. 1. *Pittosporum bracteolatum* Endl., flowering branch.

again in July 1968, and fruits ripened in May 1969. It flowered again in July 1969, but no fruits formed. It has survived fairly strong winds without damage. It is unlikely to survive heavy frosts, but should withstand salt spray. The fastigate habit limits its value as a shade tree, but it is suitable for planting to provide shelter and privacy.

The following description has been amended from Cooper 1956, p. 123:

Trees to 12 m tall; branchlets grayish-brown, the young parts sparsely tomentulose, soon glabrate. Leaves alternate, frequently crowded at the tips of the branches, narrowly elliptic, acuminate, cuneate to attenuate at base, entire, 5 - 12 cm long, 2.0 - 3.6 cm broad, glossy green above, paler beneath, papery, sparsely pubescent when young, glabrescent, margins revolute, costa immersed above, raised beneath, secondary veins 8 - 14 per side, anastomosing, obscure above, distinct beneath; petioles 4 - 9 mm long, 1 - 2 mm broad. Flowers terminal, 1 - 8, fascicled; pedicels 1-flowered, rarely 2-flowered, 2 - 3 cm long, accrescent and recurved in fruit, usually bearing a subulate bract, subtended by a loose whorl of leaves above a cluster of caducous sparsely ciliate

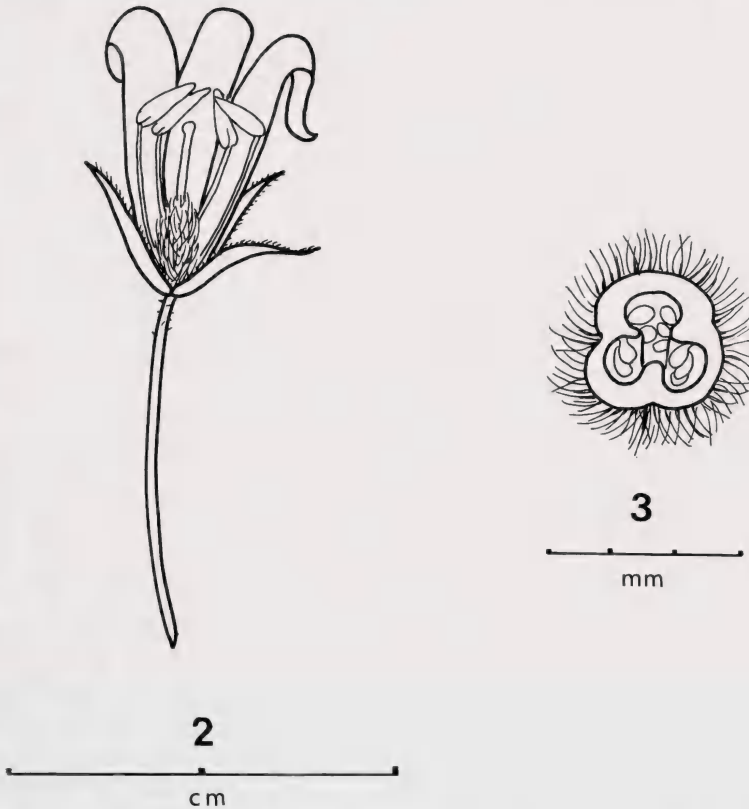


FIG. 2. Flower, with one sepal, two petals and an anther removed; 3 transverse section of ovary.

bud scales about 1 cm long. Sepals 5, free to the base, subulate, acuminate, 10.0 - 13.5 mm long, 2.5 - 3.0 mm broad, tomentulose or glabrescent, ciliate; petals usually 5, but rarely 4 or 6 in number, linear-subulate, 1.5 - 2.0 cm long, 2.0 - 4.5 mm broad, free, recurved above the middle, yellow-green becoming cream with age; stamens 5, 7.5 - 13 mm long, anthers sagittiform, 1.5 - 3.0 mm long. Pistil at anthesis slightly shorter than the stamens; ovary 4 - 7 mm long, 1.5 - 5.0 mm

broad, tomentose; style 4.0 - 4.5 mm long; stigma obscurely capitate. Capsules globose to ovoid, usually 3-valved, but occasionally 2-valved, 2.0 - 3.5 cm long, 1.5 - 2.5 cm broad, brown-tomentose or glabrescent, rugose; valves convex to slightly sulcate in transverse section, 3 - 5 mm thick, woody, light yellow within, with a conspicuous placenta bearing two rows of short stout funicles from the base to the apex; seeds about 70, black, sticky, 3 - 4 mm in diameter.

Found only on Norfolk Island. Flowers in the winter months (June to September).

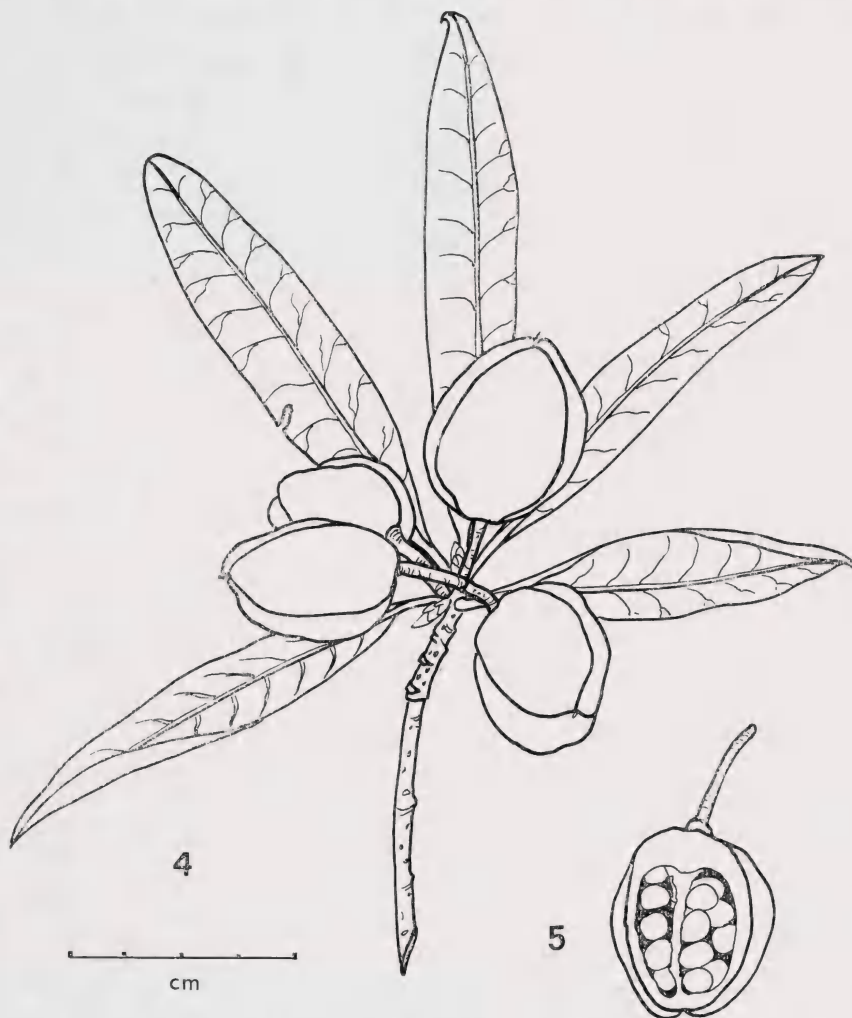


FIG. 4. *Pittosporum bracteolatum* Endl., fruiting branch; 5 fruit in longitudinal section.

Specimens examined in herbaria overseas are listed in Cooper 1956, p. 123. Voucher specimens in the Herbarium of the Auckland Institute and Museum are:—

- 21 (F.B. 159) Insel Norfolk, Mt Pitt, Ferd. Bauer (fr.). Ex Herb. Musei Hist. Natur. Vindob., on loan.
- 48881 Norfolk Island, Mt Pitt, W.R.B. Oliver, Nov 1956 (fr.green).
- 70473 same locality, R. S. Lediard, Oct 1960 (fr.green).
- 116510 Cultivated, Museum courtyard, J. H. Goulding, Aug 1967 (fl.).
- 118356 same locality and collector, Jul 1968 (fl.).
- 120520 same locality and collector, May 1969 (fr.black).

I am most grateful to Miss J. H. Goulding for drawings of the plant in the Museum courtyard, and to the Director, Naturhistorisches Museum, Vienna, for the loan of a fragment of Ferdinand Bauer's collection.

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